

## ABSTRACT

An apparatus and method for measuring spatial displacement of an animal's paw injected with irritant. This apparatus comprises an electromagnetic detecting assembly having (1) a transmitting occilator for generating electrical current (2) an electromagnetic transmitter coil coupled to the occilator for generating an electromagnetic field (3) an electromagnetic receiving coil placed in axial plane directly below the transmitter coil (4) a first, receiving amplifier connected to the receiving coil (5) an amplitude detector connected to the receiving amplifier (6) a second amplifier connected to the amplitude detector (7) a metal object attached to the animal's paw (8) and a cylindrical observation chamber of a diameter not greater than the diameter of the generated magnetic field.

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